	Application No.	Applicant(s)
Notice of Allowability	09/829,255	LEVITAN, GUTMAN
	Examiner	Art Unit
	Aaron C. Perez-Daple	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *Amendment filed 1/18./05*.

2. ☒ The allowed claim(s) is/are *7 and 8*.

3. ☒ The drawings filed on *10 April 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

U.S. Patent and Trademark Office
PTOL-37 (Rev. 1-04)   Notice of Allowability   Part of Paper No./Mail Date 20050609

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than

the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Ilya Zborovsky on June 6, 2005. The amendments were proposed by the Examiner for the

purpose of clarification.

2.   Claims 7 and 8, as amended below, are allowed.

3.   Please amend the application as follows:

In the Claims:

Claim 7 (currently amended): An Internet access system reducing Internet traffic and

delays in content delivery comprising:

· two-way addressable communication means for transmitting data between devices

connected to the means by directing data to addresses assigned to the devices;

a broadcast multichannel medium for transmitting data in a broadcast manner;

a multichannel data transmitter provided at a transmission center and coupled to the

broadcast multichannel medium;

a broadcast server located at the transmission center and coupled to said two-way

addressable communication means for receiving requests for Internet objects from

Internet clients and connected to the Internet via a network interface for downloading

the requested objects from web servers located anywhere in the world and further

coupled to said multichannel data transmitter for transmitting the downloaded Internet

objects in a broadcast manner in order that Internet clients that requested the same object

could download the object simultaneously;

said broadcast server operative for maintaining a server selection list of Internet

objects requested by Internet clients and ~~providing for each object of the selection list a~~

~~number of clients requested the object~~ counting a number of clients that requested each

object;

downloading only one copy of each object of the server selection list from its

origin web server no matter how many clients have requested that object, thereby

reducing Internet traffic;

selecting channels of said multichannel data transmitter for broadcast transmission of

downloaded objects and maintaining a broadcast schedule specifying a transmission

channel for each object to be transmitted;

transmitting the broadcast schedule on a channel known to Internet clients;

transmitting each Internet object on the channel specified for that object in the

broadcast schedule;

retaining Internet objects requested by more than one client and repeatedly

transmitting the objects with time intervals small enough so not to be considered as

delays in content delivery;

continuing the transmission during a period of time determined for each object

proportionally to the number of clients that requested the object in order that other clients

whose users will request the object during that period of time could download the object

without sending a request to the broadcast server, thereby further reducing Internet traffic

and reducing delays in content delivery;

at recipient side, a multichannel data receiver coupled to said broadcast multichannel

medium for receiving data transmitted by said multichannel data transmitter;

an Internet client coupled to the multichannel data receiver so to be able to switch

channels of the receiver and obtain data transmitted on different channels, and further

coupled to said two-way addressable communication means for sending requests to said

broadcast server;

said Internet client being operative for obtaining a user request for an Internet object;

receiving said broadcast schedule over a channel of said multichannel data receiver;

identifying a channel specified in the broadcast schedule for transmission of the

Internet object requested by the user if the object is included in the broadcast schedule;

sending a request to the broadcast server only if the object requested by the user is not

included in the broadcast schedule, thereby reducing interaction with the broadcast

server, and waiting until the object will be included in the broadcast schedule;

switching said multichannel data receiver to the channel specified in the broadcast

schedule for transmission of the Internet object requested by the user;

downloading the object from that channel; and

presenting the object to the user.

Claim 8 (currently amended): An Internet access system reducing Internet traffic and

delays in content presentation comprising:

two-way addressable communication means for transmitting data between devices

connected to the means by directing data to addresses assigned to the devices;

a broadcast multichannel medium for transmitting data in a broadcast manner;

a multichannel data transmitter provided at a transmission center and coupled *to* the

broadcast multichannel medium;

a broadcast server located at the transmission center and coupled to said two-way

addressable communication means for receiving requests for Internet objects from

Internet clients and connected to the Internet via a network interface for downloading the

requested objects from Internet servers located anywhere in the world and further coupled

to said multichannel data transmitter for transmitting the downloaded objects in a

broadcast manner so that Internet clients that requested the same object could download

the object simultaneously;

said broadcast server operative for maintaining a server selection list of Internet

objects requested by Internet clients and ~~providing for each object of the selection list a~~

~~number of clients requested that object~~ counting a number of clients that requested each

object;

scheduling objects of the server selection list for broadcast transmission so to transmit

objects requested by more than one client repeatedly during a period of time determined

for each object proportionally to the number of clients that requested the object in order

that other clients whose users will request the object during that period of time could

download the object without sending a request to the broadcast server;

maintaining a broadcast schedule specifying a transmission time and a transmission channel for each object to be transmitted;

transmitting the broadcast schedule via a channel known to Internet clients;

downloading each Internet object included in the broadcast schedule from its origin web server before the time of scheduled broadcast transmission of that object;

limiting the download to only one copy of the object no matter how many clients have requested that object, thereby reducing Internet traffic;

transmitting only one copy of each Internet object at the time and on the channel specified for that object in the broadcast schedule;

at recipient side, a multichannel data receiver coupled to said broadcast multichannel medium for receiving data transmitted by said multichannel data transmitter;

an Internet client coupled to the multichannel data receiver so to be able to switch channels of the receiver and obtain data transmitted on different channels, and further coupled to said two-way addressable communication means for sending requests to said broadcast server;

said Internet client being operative for obtaining and storing a user's selection list of Internet objects;

receiving said broadcast schedule over a channel of said multichannel data receiver;

for each Internet object of the user's selection list, which is included in the broadcast schedule, identifying a time and a channel specified in the broadcast schedule for transmission of that object;

sending a request to the broadcast server only for those objects of the user's selection list, which are not included in the broadcast schedule, thereby reducing interaction with the broadcast server;

at a time specified in the broadcast schedule for transmission of an Internet object of the user's selection list, switching said multichannel data receiver to the channel specified in the broadcast schedule for transmission of that object;

downloading the object from that channel and, if necessary, replacing an old version of the object by a new one;

storing the object; and

instantly presenting the stored object to the user at a time selected by the user, thereby reducing delays in content presentation.

4.   The following is an examiner's statement of reasons for allowance. The prior art of record teaches broadcasting Internet objects to clients over multiple channels from a broadcast server, providing a broadcast schedule to the clients, and downloading the Internet objects in the schedule from originating web servers. However, the prior art of record does not teach or suggest repeatedly transmitting Internet objects during a period of time proportionally to the number of clients that requested the object in order that other clients whose users will request the object during that period of time could download the object without sending a request to the broadcast server. Therefore, the present invention teaches an improved Internet access broadcast system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C. Perez-Daple whose telephone number is (571) 272-3974. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/10/05

Aaron Perez-Daple

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100